

# NASA-LaRC SAFETY NEWSLETTER

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## **ALCOHOL IMPAIRED DRIVING: The Drink We Can't Afford**

Alcohol impaired driving accounts for approximately one death on U.S. highways every half hour, adding up to over 17,700 lives lost in 1992. That's almost 49 deaths per day, eight of them persons under the age of 21. Over the last decade, about a quarter of a million Americans died in alcohol-related highway crashes, approximately the population of the city of Norfolk. Estimates of the total years of life lost this way are about three-quarters of a million - a very long time. Roughly another 1.4 million of our family members, friends, and neighbors are injured in these crashes every year. Over the same ten years, these injured (some of them permanently disabled) individuals equal the population of another familiar community, the city of San Diego, California. The image of everyone in a city like Norfolk dying and every resident of San Diego suffering injury, suggests the scope of our problem.

If these numbers are awesome, what of their impact on our economy? The National Highway Traffic Safety Administration (NHTSA) puts the cost for highway crashes involving a driver or pedestrian impaired by alcohol or other drugs at \$46.1 billion, or \$183 annually for every man, woman, and child in the U.S. NHTSA estimates total medical costs per critical injury at an average of more than \$250,000 and concludes that every alcohol-related highway death costs society nearly \$800,000. This is an enormous bill the U.S. economy can ill afford.

A decade-plus of public and private sector efforts to prevent alcohol & other drug impaired driving problems underscores the obvious: prevention works. Prevention targeting of drivers under 21 has resulted in a declining proportion of 15 to 20 year-old intoxicated drivers involved in crashes. A number of today's youth who would have used alcohol if the norms of 1979 prevailed, will not drink, thanks to prevention.

Impaired driving crashes can be prevented.

Communities can change, just as laws and individual behavior can change. We can change the grim statistics. We can save precious health care dollars and over-burdened law enforcement resources. We can save lives. We can make prevention work for everyone.

## **HARNESSES vs. BELTS**

A human body in motion, like a worker falling, gains energy and needs someplace to discharge that energy. The problem with safety belts is that energy has only one release point-the abdomen, an unprotected area of the body. A harness distributes that energy over a wider area, and the pelvic area is better able to withstand stress than the abdomen. Also, the pendulum effect ( swing while suspended) is less pronounced in a harness.

The distribution of stress makes a difference not only in a fall, but while a worker waits for rescue. Since the weight is more evenly distributed, a harness permits better circulation. A U.S. Air Force study discovered that the average time for rescue is 1.5 minutes. In that time the safety belt can cut off the worker's circulation. Harnesses will not have that effect.

Another problem with belts is that there are documented cases of people falling out of them while awaiting rescue.

OSHA received public comments on requiring harness and other equipment over safety belts. The Agency hasn't indicated whether it will change its requirements when it publishes the new safety standard. Some safety experts, however, say they expect new OSHA rules to require harnesses instead of safety belts.